

DOCKET NO: 217205US2



IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :
AKIO WATANABE, ET AL. : EXAMINER: RAMPURIA, S.
SERIAL NO: 10/015,899 :
FILED: DECEMBER 17, 2001 : GROUP ART UNIT: 2191
FOR: PROCESSING SYSTEM AND :
METHOD USING RECOMPOSABLE
SOFTWARE

APPEAL BRIEF

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

SIR:

This is an appeal from the decision of the Examiner dated July 18, 2006, which finally rejected Claims 9-47 in the above-identified patent application. A Notice of Appeal was timely filed on January 18, 2007.

I. REAL PARTY-IN-INTEREST

The real party-in-interest is Ricoh Company, Ltd.

II. RELATED APPEALS AND INTERFERENCES

Appellants, Appellants' legal representative, and the assignees are aware of no prior or pending appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

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III. STATUS OF CLAIMS

Claims 9-47 have been finally rejected and form the basis for this appeal. Appendix VIII includes a clean copy of Claims 9-47.

IV. STATUS OF AMENDMENTS

An amendment after final rejection was filed October 18, 2006. This amendment was entered for the purposes of appeal by the Advisory Action dated March 22, 2007.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Independent Claim 9 is directed to an inspecting apparatus for inspecting a performance of a variety of circuit baseboards including a programmable logic device (PLD) configured to inspect a circuit baseboard based upon a signal transmitted from the circuit baseboard, a file storing device configured to store a plurality of PLD files, a correspondence assigning device configured to assign correspondence of a PLD file to a type of a circuit baseboard to be loaded with the PLD file, a registering memory configured to store information of the correspondence, a displaying device configured to display a list of the circuit baseboards, a determining device configured to determine a type of a circuit baseboard selected from the list via the displaying device, a PLD file specifying device configured to refer to the correspondence information of the registering memory and specify an applicable PLD file based upon the circuit baseboard type, and a loading device configured to load the PLD with the applicable PLD file.

An exemplary embodiment is described in the specification from paragraphs 149-153 with reference to Figures 21 and 22. In this exemplary embodiment, a PLD 2a is configured to inspect a circuit baseboard based upon a signal transmitted from the circuit baseboard. A file storing device 11 is configured to store a plurality of PLD files. A correspondence

assigning device 13 is configured to assign correspondence of a PLD file to a type of a circuit baseboard to be loaded with the PLD file. A registering memory 14 is configured to store information of the correspondence. A displaying device 16 is configured to display a list of the circuit baseboards. A determining device 19 is configured to determine a type of a circuit baseboard selected from the list via the displaying device. A PLD file specifying device 15b is configured to refer to the correspondence information of the registering memory and specify an applicable PLD file based upon the circuit baseboard type, and a loading device 15b is configured to load the PLD with the applicable PLD file.

Independent Claim 10 is directed to an inspecting apparatus for inspecting a performance of a variety of circuit baseboards including a PLD configured to inspect a circuit baseboard based upon a signal from the circuit baseboard, a PLD file storing device configured to store a plurality of PLD files, a correspondence assigning device configured to assign correspondence of a PLD file to a circuit baseboard to be loaded with the PLD file, a registering memory configured to store information of the correspondence, an ID reading device configured to read identification information and determine a circuit baseboard, the identification information being previously included in the inspection objective baseboard, a specifying device configured to refer to the correspondence information and specify a PLD file based on the circuit baseboard determined by the ID reading device, and a loading device configured to load the prescribed PLD with the applicable PLD file.

An exemplary embodiment is described in the specification from paragraphs 149-153 with reference to Figures 21 and 22. In this exemplary embodiment, a PLD 2a is configured to inspect a circuit baseboard based upon a signal transmitted from the circuit baseboard. A PLD file storing device 11 is configured to store a plurality of PLD files. A correspondence assigning device 13 is configured to assign correspondence of a PLD file to a type of a circuit baseboard to be loaded with the PLD file. A registering memory 14 is configured to store

information of the correspondence. An ID reading device 18 is configured to read identification information and determine a circuit baseboard. The identification information is previously included in the inspection objective baseboard. A specifying device 14 is configured to refer to the correspondence information and specify a PLD file based on the circuit baseboard determined by the ID reading device. A loading device 15b is configured to load the PLD with the applicable PLD file.

Independent Claim 11 is directed to An inspecting apparatus for inspecting a performance of a variety of circuit baseboards including a PLD circuit configured to inspect a circuit baseboard based upon a signal from the circuit baseboard, a PLD file storing device configured to store a plurality of PLD files, a correspondence assigning device configured to assign correspondence of a PLD file to a circuit baseboard to be loaded with the PLD file, a registering memory configured to store information of the correspondence, an ID determination device configured to read identification information and determine a circuit baseboard, the identification information previously included in the circuit baseboard, a display device configured to display a list of a plurality of circuit baseboards, a determining device configured to determine a type of a circuit baseboard selected from the list, an accordance determining device configured to determine accordance of the type of the circuit baseboard specified by the circuit board determining device with that determined by the ID reading device, a PLD file loading device configured to refer to the correspondence information and specify an applicable PLD file in accordance with the type of the circuit baseboard from the registering memory when the determination result is positive, and a loading device configured to load the PLD with the applicable PLD file.

An exemplary embodiment is described in the specification from paragraphs 149-153 with reference to Figures 21 and 22. In this exemplary embodiment, a PLD 2a is configured to inspect a circuit baseboard based upon a signal transmitted from the circuit baseboard. A

PLD file storing device 11 is configured to store a plurality of PLD files. A correspondence assigning device 13 is configured to assign correspondence of a PLD file to a type of a circuit baseboard to be loaded with the PLD file. A registering memory 14 is configured to store information of the correspondence. An ID determination device 19 is configured to read identification information and determine a circuit baseboard. A display device 16 is configured to display a list of the circuit baseboards. A determining device 18 is configured to determine a type of a circuit baseboard selected from the list. An accordance determining device 18 is configured to determine accordance of the type of the circuit baseboard specified by the circuit board determining device with that determined by the ID reading device. A PLD file loading device 15 is configured to refer to the correspondence information and specify an applicable PLD file in accordance with the type of the circuit baseboard from the registering memory when the determination result is positive. A loading device 15b is configured to load the PLD with the applicable PLD file.

Independent Claim 17 is directed to a general-purpose inspecting system having a log function of filing inspection resultant as a log file to be analyzed. The general-purpose inspecting system includes a data sampling section configured to sample predetermined information from the log file as sample data, and a sample data file generation section configured to generate a sample file having a smaller size than a size of the log file. The sample data file stores the sampled data.

An exemplary embodiment is described in the specification from paragraphs 194-202 with reference to Figures 35-42. In this exemplary embodiment, a data sampling section 23 is configured to sample predetermined information from a log file as sample data. A sample data file generation section 24 is configured to generate a sample file having a smaller size than a size of the log file. The sample data file stores the sampled data.

Independent Claim 19 is directed to a general-purpose inspecting system having a log function of filing inspection resultant in a log file to be analyzed. The general-purpose inspecting system includes a log file generation section configured to generate a log file storing the inspection resultant, and a sample data file generation section configured to generate a sample data file configured to store predetermined information to be inspected by sampling from the log file based upon preset information.

An exemplary embodiment is described in the specification from paragraphs 194-202 with reference to Figures 35-42. In this exemplary embodiment, a log file generation section 29 is configured to generate a log file storing the inspection resultant. A sample data file generation section 24 is configured to generate a sample data file configured to store predetermined information to be inspected by sampling from the log file based upon preset information.

Independent Claim 23 is directed to a general-purpose inspecting system for inspecting an object connected to an input/output interface using a command including a software recomposing section configured to recompose a software of inspection use in accordance with a type of the object, and means for reading inspection progress information related to the object during simulation. The means for reading displays a resultant on a screen of a display unit.

An exemplary embodiment is described in the specification from paragraphs 31 and 217 with reference to Figures 43 and 47. In this exemplary embodiment, a software recomposing section 9 is configured to recompose software of inspection use in accordance with a type of the object. Means for reading 9a reads inspection progress information related to the object during simulation. The means for reading 9a displays a resultant on a screen of a display unit 2.

Independent Claim 32 is directed to a computer program product storing program instructions for execution on a computer system, which when executed by the computer system cause the computer system to perform a method to inspect an object connected to an input/output interface using a command. The method includes recombining an inspection software based on a type of the object, displaying respective inspection items to be inspected on a screen in order of execution, providing a plurality of object buttons for inspection items on the screen, selectively setting a breakpoint in at least one prescribed one of the object buttons, continuously inspecting items one after another, halting inspection regarding a prescribed inspection item corresponding to the set breakpoint, reading inspection progress information related to the object during a simulation, and displaying a resultant on a screen.

An exemplary embodiment is described in the specification from paragraphs 209-215 with reference to Figures 44-46. In this exemplary embodiment, inspection software is recombined based on a type of the object (Paragraph 213). Respective inspection items to be inspected on a screen are displayed in order of execution (Paragraph 210). A plurality of object buttons are provided for inspection items on the screen (Figure 46). A breakpoint is selectively set in at least one prescribed one of the object buttons (Step 202). Items are inspected continuously one after another (Step 203). Inspection is halted regarding a prescribed inspection item corresponding to the set breakpoint (Paragraph 211). Inspection progress information is read related to the object during a simulation (Paragraph 210). A resultant is displayed on a screen (Paragraph 211).

Independent Claim 33 is directed to a method for inspecting an object connected to an input/output interface using a command including recombining an inspection software based on a type of the object, reading inspection progress information related to the object during a simulation, and displaying a resultant on a screen.

An exemplary embodiment is described in the specification from paragraphs 209-215 with reference to Figures 44-46. In this exemplary embodiment, inspection software is recombined based on a type of the object (Paragraph 213). Inspection progress information is read related to the object during a simulation (Paragraph 210). A resultant is displayed on a screen (Paragraph 211).

Independent Claim 41 is directed to a method for inspecting an object connected to an input/output interface using a command including recombining a software configured to inspect based on a type of the object, reading inspection progress information related to the object during a simulation, and displaying a resultant on a screen.

An exemplary embodiment is described in the specification from paragraphs 209-215 with reference to Figures 44-46. In this exemplary embodiment, software configured to inspect is recombined based on a type of the object (Paragraph 213). Inspection progress information is read related to the object during a simulation (Paragraph 210). A resultant is displayed on a screen (Paragraph 211).

Independent Claim 42 is directed to a general-purpose inspecting system including a controlled device configured to perform a prescribed function, an interface section configured to indicate a status of the controlled device, a control processor configured to inspect the controlled device by transmitting a prescribed command to the controlled device, and means for determining in advance to transmission of the prescribed command whether an execution result of command processing will be abnormal by accessing the interface section and acquiring information of status of the controlled device.

An exemplary embodiment is described in the specification from paragraphs 239-262 with reference to Figures 54-62. In this exemplary embodiment, a controlled device 10 is configured to perform a prescribed function. An interface section 12 is configured to indicate a status of the controlled device. A control processor 20 is configured to inspect the

controlled device by transmitting a prescribed command to the controlled device. Element 22 is means for determining in advance to transmission of the prescribed command whether an execution result of command processing will be abnormal by accessing the interface section and acquiring information of status of the controlled device.

Independent Claim 45 is directed to a method having a first thread including awaiting a user input in the first thread, transmitting a command to a controlled device based upon the user input, causing the controlled device to execute processing the command, receiving a command resultant, displaying a content of the command resultant at a control processor site, generating a second thread before entering a wait state, and specializing the second thread to indicate a status of the controlled device on a user interface.

An exemplary embodiment is described in the specification from paragraphs 239-262 with reference to Figures 55-62. In this exemplary embodiment, user input is awaited in the first thread (Step 111). A command is transmitted to a controlled device based upon the user input (Step 114). The controlled device is caused to execute processing the command (Step 123). A command resultant is received (Step 115). A content of the command resultant is displayed at a control processor site (Step 117). A second thread is generated before entering a wait state (Step 241). The second thread is specialized to indicate a status of the controlled device on a user interface (Step 231).

Independent Claim 46 is directed to a general-purpose inspecting method including awaiting a user input, transmitting a prescribed command to a controlled device upon the user input, causing the controlled device to execute the prescribed command, receiving the command resultant, displaying a content of the command resultant at a control processor site, determining if a specific condition is satisfied in the controlled device, and automatically executing specific processing by the control processor when the specific condition is satisfied.

An exemplary embodiment is described in the specification from paragraphs 239-262 with reference to Figures 55-62. In this exemplary embodiment, user input is awaited (Step 111). A prescribed command is transmitted to a controlled device upon the user input (Step 114). The controlled device is caused to execute processing the command (Step 123). A command resultant is received (Step 115). A content of the command resultant is displayed at a control processor site (Step 117). It is determined if a specific condition is satisfied in the controlled device (Step 175). Specific processing is automatically executed by the control processor when the specific condition is satisfied (Step 176).

Independent Claim 47 is directed to a general-purpose inspecting method including awaiting user input, transmitting a prescribed command to a controlled device, causing the controlled device to execute processing the prescribed command; receiving a prescribed command resultant, displaying a content of the prescribed command resultant at a control processor site, determining if a transient phenomenon occurs when a controlled device transmits acknowledge, repeatedly transmitting the prescribed command until the transient phenomenon is terminated from the controlled device, and awaiting user input after termination of the transient phenomenon.

An exemplary embodiment is described in the specification from paragraphs 239-262 with reference to Figures 55-62. In this exemplary embodiment, user input is awaited (Step 111). A prescribed command is transmitted to a controlled device upon the user input (Step 114). The controlled device is caused to execute processing the command (Step 123). A command resultant is received (Step 115). A content of the command resultant is displayed at a control processor site (Step 117). It is determined if a transient phenomenon occurs when a controlled device transmits acknowledge (Step 293). The prescribed command is repeatedly transmitted until the transient phenomenon is terminated from the controlled

device (Step Steps 291-293). User input is awaited after termination of the transient phenomenon (Step 297).

VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

The grounds of rejection to be reviewed on appeal are:

- (a) whether Claims 9, 11, 14, 16, 23, 32, 33, 41, 46, and 47 are unpatentable based on under 35 U.S.C. §112, second paragraph;
- (b) whether Claims 23, 33, and 41-47 are anticipated under 35 U.S.C. §102(a) by Kenji (Japanese Patent No. 09-081416);
- (c) whether Claims 17-22 are unpatentable under 35 U.S.C. §103(a) over Harrison (U.S. Patent No. 6,421,071);
- (d) whether Claims 9-14 and 16 are unpatentable under 35 U.S.C. §103(a) over Kenji in view of Kunio (Japanese Patent No. 09-006702) and further in view of Nakamura (U.S. Patent No. 6,381,565);
- (e) whether Claims 15 is unpatentable under 35 U.S.C. §103(a) over Kenji in view of Kunio and further in view of Grey et al. (U.S. Patent No. 6,401,220, herein “Grey”);
- (f) whether Claims 24-32 and 34-40 are unpatentable under 35 U.S.C. §103(a) over Kenji in view of Limon, Jr. et al. (U.S. Patent No. 6,453,435, herein “Limon”).

VII. ARGUMENTS

A. Claims 9, 11, 14, 16, 17, 19, 23, 32, 33, 41, 46, and 47 are in compliance with all requirements under 35 U.S.C. §112, second paragraph

It is respectfully submitted that the use of the word “type” as a *noun* is *not* indefinite. The use of “type” as an *adjective* is proscribed by case law, as discussed in MPEP

§2173.05(b). Accordingly, the use of “type” in Claims 9, 11, 14, 16, 23, 32, 33, and 41 is believed to be in compliance with all requirements under 35 U.S.C. §112, second paragraph.

With regard to Claims 17 and 19, Claims 17 and 19 no longer recite “only necessary information.”

With regard to Claim 46, it is respectfully submitted that the use of “a specific condition” in Claim 46 is definite as the specification provides exemplary embodiments of this claim term, for example in paragraph 253 at pages 54-55 of the present specification.

Finally, Claim 47 no longer recites “chattering.”

Thus, Claims 9, 11, 14, 16, 17, 19, 23, 32, 33, 41, 46, and 47 are believed to be in compliance with all requirements under 35 U.S.C. §112, second paragraph.

B. Claims 23, 33, and 41-47 are not anticipated by Kenji

Claim 23 recites a general-purpose inspecting system comprising, *inter alia*:

a software recomposing section configured to
recompose a software of inspection use in accordance with a
type of the object; and
means for reading inspection progress information
related to the object during simulation, said means for reading
displays a resultant on a screen of a display unit.

The outstanding Office Action cited the phrase of Kenji stating “the test modification of small-scale reconstruction of software or a control unit” as describing “a software recombining section” as defined in Claim 23.¹ However, well settled case law holds that for a proper anticipation rejection “The identical invention must be shown *in as complete detail as is contained in the ... claim.*” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). (Emphasis added.) See also MPEP §2131. In the present case, it is respectfully submitted that the recitation of “the test modification of small-scale reconstruction of software or a control unit” in Kenji does not teach “a software

¹See the outstanding Office Action at page 7, lines 23-25.

recombining section configured to recombine a software of inspection use in accordance with a type of the object,” as recited in Claim 23.

The outstanding Office Action cited paragraphs 6 and 12 of Kenji as describing “means for reading inspection progress information” as defined in Claim 23.²

Initially, the statement in the “Description of the Prior Art” of Kenji that a *result* can be displayed on a control unit 2 does not teach “means for reading inspection *progress information* related to the object *during* simulation, said means for reading displays a resultant on a screen of a display unit” as recited in Claim 23. In addition, this statement is unrelated to the description of the invention of Kenji in paragraph 12.

Further, the sending of data to an output file in paragraph 12 of Kenji does *not* describe *displaying a resultant on a screen of a display unit*. As previously noted, paragraph 12 of Kenji does *not* describe the displaying *anything* on a screen. Thus, it is respectfully submitted that Kenji does not teach *in as complete detail as is contained in the claim* “means for reading inspection progress information” as recited in Claim 23. As Kenji does not teach each and every element of Claim 23, Claim 23 is not anticipated by Kenji and is patentable thereover.

As Claims 33 and 41 recites similar features to those of Claim 23 in method form, it is respectfully submitted that Claims 33 and 41 is patentable for at least the reasons described above with respect to Claim 23.

Claim 42 recites a general purpose inspecting system comprising, *inter alia*, “means for determining in advance to transmission of the prescribed command whether an execution result of command processing will be abnormal by accessing the interface section and acquiring information of status of the controlled device.”

²See the outstanding Office Action at page 7, line 26 to page 8, line 3.

The outstanding Office Action asserted that Kenji inherently discloses this feature,³ but, contrary to well settled case law, failed to provide any evidence to support this assertion.⁴ As previously noted, “To establish inherency, *the extrinsic evidence ‘must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill.*” Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.” *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (Emphasis added.).

In the present case, *no evidence of any kind* has been provided to establish that “means for determining *in advance to transmission of the prescribed command whether an execution result of command processing will be abnormal* by accessing the interface section and acquiring information of status of the controlled device” is inherent in the disclosure of Kenji.

The Advisory Action dated March 22, 2007 repeated this assertion, and then cited apparently cited column 2, line 65 to column 3, line 20 Harrison as evidence that the above-quoted element is inherent in Kenji. However, it is respectfully submitted that the description of the display of multiple log files on one screen in the cited portion of Harrison does not prove that Kenji *necessarily* includes “means for determining in advance to transmission of the prescribed command whether an execution result of command processing will be abnormal by accessing the interface section and acquiring information of status of the controlled device.” Thus, Claim 42 is not inherently described by Kenji. Accordingly, it is respectfully submitted that Kenji does not teach or suggest, either explicitly or inherently, “means for determining” as recited in Claim 42. As Kenji does not teach each and every

³See the outstanding Office Action at page 5, lines 14-15.

⁴See the outstanding Office Action at page 4, lines 7-10.

element of Claim 42, Claim 42 (and Claims 43 and 44 dependent therefrom) is not anticipated by Kenji and is patentable thereover.

Claim 45 recites in part, “generating a second thread before entering a wait state” and “specializing said second thread to indicate a status of the controlled device on a user interface.” Claim 46 recites in part, “determining if a specific condition is satisfied in the controlled device,” and “automatically executing specific processing by said control processor when the specific condition is satisfied.” Claim 47 recites in part, “determining if a transient phenomenon occurs when a controlled device transmits acknowledge,” “repeatedly transmitting the prescribed command until the transient phenomenon is terminated from said controlled device,” and “awaiting user input after termination of the transient phenomenon.”

The outstanding Office Action cited paragraph 11 of Kenji as describing all of these elements.⁵ However, as previously noted, the cited portion of paragraph 11 of Kenji, which states “equipment 21 might be connected and informational transmission and reception could be performed to the control section 3 or a processor,” only broadly describes that information can be exchanged between equipment 21 and control section 3 or a processor. The information exchanged is not explicitly identified by Kenji. As noted above, well settled case law holds that for a proper anticipation rejection the identical invention must be shown *in as complete detail as is contained in the claim*. See also MPEP §2131. In this case, Kenji does not describe the above quoted elements in the detail contained in Claims 45-47, as Kenji only vaguely describes communication of (unspecified) information. Accordingly, as paragraph 11 of Kenji does not describe “generating a second thread before entering a wait state,” “specializing said second thread to indicate a status of the controlled device on a user interface,” “determining if a specific condition is satisfied in the controlled device,” “automatically executing specific processing by said control processor when the specific

⁵See the outstanding Office Action at page 10, lines 11-13, page 11, lines 11-14, and page 12, lines 15-20.

condition is satisfied,” “determining if a transient phenomenon occurs when a controlled device transmits acknowledge,” “repeatedly transmitting the prescribed command until the transient phenomenon is terminated from said controlled device,” or “awaiting user input after termination of the transient phenomenon,” Claims 45-47 are not anticipated by Kenji and are patentable thereover.

In the Amendment filed October 18, 2007, it was respectfully requested that for the purposes of appeal the Advisory Action provide an explanation of how the cited sentence of Kenji provides all of the detail required by each of the above-quoted elements of Claims 45-47. No explanation was provided in the Advisory Action of March 22, 2007.

C. Claims 17-22 are patentable over Harrison

Claim 23 recites a general-purpose inspecting system comprising, *inter alia*:

a software recomposing section configured to
recompose a software of inspection use in accordance with a
type of the object; and
means for reading inspection progress information
related to the object during simulation, said means for reading
displays a resultant on a screen of a display unit.

Claim 17 recites a general-purpose inspecting system comprising, *inter alia*, “a sample data file generation section configured to generate a sample file having a smaller size than a size of the log file, said sample data file storing the sampled data.”

The outstanding Office Action cited Figure 3 of Harrison and column 5, line 62 to column 6, line 55 of Harrison as describing this element. However, as noted previously, Harrison only describes a system for simultaneously *displaying and comparing* three original log files. There is no teaching or suggestion in any part of Harrison for *generating a sample file* having a smaller size than a size of the log file, or sampling a log file. The cited portions of Harrison only describe *scrolling through the three original log files*. *None* of the cited

portions of Harrison describe the *creation* of any other file. Accordingly, it is respectfully submitted that Harrison does not teach “a sample data file generation section” as recited in Claim 17. As Harrison does not teach each and every element of Claim 17, Claim 17 (and Claim 18 dependent therefrom) is not anticipated by Harrison and is patentable thereover.

The Amendment filed October 18, 2006 respectfully requested that for the purposes of appeal the Advisory Action provide the specific portion of Harrison that describes the creation of *any other file based on the three original log files*. The Advisory Action of March 22, 2007 simply repeated the citation of the above-discussed portion of Harrison that compares three log files and does not create any other file.

As Claim 19 recites similar elements to Claim 17, it is respectfully submitted that Claim 19 (and Claim 20-22 dependent therefrom) is patentable for at least the reasons described above with respect to Claim 17.

D. Claims 9-14 and 16 are patentable over Kenji in view of Kunio and further in view of Nakamura

Claim 9 recites an inspecting apparatus comprising, *inter alia*:

- a displaying device configured to display a list of the circuit baseboards;
- a determining device configured to determine a type of a circuit baseboard selected from the list via the displaying device; and
- a PLD file specifying device configured to refer to the correspondence information of the registering memory and specify an applicable PLD file based upon the circuit baseboard type; and
- a loading device configured to load the PLD with the applicable PLD file.

The Advisory Action of March 22, 2007 cited paragraphs 11-17 of Kenji as describing “a determining device configured to determine a type of a circuit baseboard

selected from the list via the displaying device.”⁶ However, it is respectfully submitted that paragraphs 11-17 of Kenji do not describe the *selection of a circuit baseboard from a list*, much less “a determining device” as defined in Claim 9. As noted previously, paragraph 15 of Kenji states that a preprogrammed input data file 22 is displayed on a screen, and the user may then input a command to send the data to the control section 3. *Thus, there is no teaching of any kind in Kenji of a selection from among types of circuit baseboards.* Kenji only describes a command to send the data to control unit 3. It is further respectfully submitted that neither Kunio nor Nakamura disclose this element either. As the cited references do not teach or suggest each and every element of Claim 9, Claim 9 (and dependent Claims 12-16) is patentable over the cited references.

The Amendment filed October 18, 2006 respectfully requested that for the purposes of appeal the Advisory Action allege with particularity where Kenji describes “a determining device” as defined in Claim 9 (i.e. what is the part number of the device described by Kenji). No such information was provided in the Advisory Action of March 22, 2007.

Claims 10 and 11 recite “an ID reading device” and “an ID determination device,” respectively. The outstanding Office Action cited paragraph 2 of Kunio as describing these elements,⁷ and also that these elements “would be obvious in Nakamura system” without citing any portion of Nakamura to support this assertion.⁸ Instead, the Office Action simply concluded “Further ID reading and determination would be obvious.”⁹ However, paragraph 2 of Kunio only describes that device driver software is different for different models. Thus, Kunio at best describes that multiple versions of device driver software may exist for different models. Therefore, Kunio does *not* teach or suggest “an ID reading device” and “an ID determination device” as defined in Claims 10 and 11. As a *prima facie* case of

⁶See the outstanding Office Action at page 4, lines 10-13.

⁷See the outstanding Office Action at page 4, line 17 to page 5, line 1.

⁸See the outstanding Office Action at page 5, lines 14-16.

⁹See the outstanding Office Action at page 15, line 20.

obviousness requires that *each and every element of the claim be taught or suggested by one of the cited references*, it is respectfully submitted that *prima facie* case of obviousness has not been made with respect to Claims 10 and 11 (and dependent Claims 12-16).

Accordingly, it is respectfully requested that the present rejection be withdrawn.

In the Amendment filed October 18, 2006, it was respectfully requested that for the purposes of appeal the Advisory Action provide the part number of the device described by Kunio or Nakamura that is alleged to be “an ID reading device” and “an ID determination device” as defined in Claims 10 and 11. No such information was provided.

Instead, the Advisory Action simply asserted that “ID for peripheral device has been created by manufacturer which identifies device on the network (page 1, paragraph [0002]). So, it would be obvious to have a reading device to determine the device on the network.” In fact, it is respectfully submitted that paragraph 2 of Kunio does *not* teach or suggest that an ID for a peripheral device has been created by a manufacturer which identifies the device on the network. Further, the statement that “it would be obvious to have a reading device to determine the device on the network” essentially concedes that Kunio does not teach or suggest such a device. In any case, no portion of Kunio is identified as teaching or suggesting such a device.

The Advisory Action also asserted “Further, ID reading and ID determination (as indicated by Applicants) would be obvious in Nakamura system since perform inspections of various circuit board.” In fact, the Applicant has never indicated that any part of the invention is included in Nakamura, and further the bare allegation that “ID reading and ID determination would be obvious in Nakamura system” essentially concedes that no portion of Nakamura teaches or suggests “an ID reading device” and “an ID determination device” as defined in Claims 10 and 11.

E. Claim 15 is patentable over Kenji in view of Kunio and further in view of Grey

Further, with regard to the rejection of Claim 15 as unpatentable over Kenji in view of Kunio and further in view of Grey, it is noted that Claim 15 is dependent from Claim 14, and thus is believed to be patentable for the reasons discussed above. Further, it is respectfully submitted that Grey does not cure any of the above-noted deficiencies of Kenji and Kunio. Accordingly, it is respectfully submitted that Claim 15 is patentable over Kenji in view of Kunio and further in view of Grey.

F. Claims 24-32 and 34-40 are patentable over Kenji in view of Limon

With regard to the rejection of Claims 24-31 as unpatentable over Kenji in view of Limon, it is noted that Claims 24-31 are dependent from Claim 23, and thus are believed to be patentable for at least the reasons discussed above with respect to Claim 23. Further, it is respectfully submitted that Limon does not cure any of the above-noted deficiencies of Kenji. Accordingly, it is respectfully submitted that Claims 24-31 are patentable over Kenji in view of Limon.

With respect to the rejection of Claim 32 under 35 U.S.C. §103(a) as unpatentable over Kenji in view of Limon, Claim 32 recites similar elements to Claims 23 and 24. It is respectfully submitted that the description in paragraph 9 of Kenji that “the test modification of small-scale reconstruction of software or a control unit” does not provide any details regarding “recombining an inspection software based on a type of the object” as recited in Claim 32. Further, the sending of data to an output file in paragraph 12 of Kenji does not describe “displaying respective inspection items to be inspected on a screen in order of execution,” as recited in Claim 32. In fact paragraph 12 of Kenji, cited on page 16, lines 16-17 of the outstanding Office Action as describing this element, does not describe the

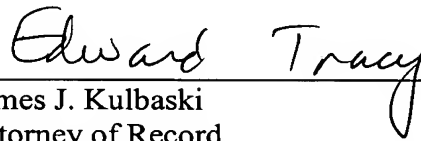
displaying anything on a screen. Furthermore, it is respectfully submitted that Limon does not cure any of these deficiencies of Kenji. Consequently, Claim 32 is patentable over Kenji in view of Limon.

Conclusion

It is respectfully requested that the outstanding rejections be REVERSED.

Respectfully submitted,

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VIII. CLAIMS APPENDIX

Claims 1-8 (Canceled).

Claim 9: An inspecting apparatus for inspecting a performance of a variety of circuit baseboards, comprising:

- a programmable logic device (PLD) configured to inspect a circuit baseboard based upon a signal transmitted from the circuit baseboard;
- a file storing device configured to store a plurality of PLD files;
- a correspondence assigning device configured to assign correspondence of a PLD file to a type of a circuit baseboard to be loaded with the PLD file;
- a registering memory configured to store information of the correspondence;
- a displaying device configured to display a list of the circuit baseboards;
- a determining device configured to determine a type of a circuit baseboard selected from the list via the displaying device; and
- a PLD file specifying device configured to refer to the correspondence information of the registering memory and specify an applicable PLD file based upon the circuit baseboard type; and
- a loading device configured to load the PLD with the applicable PLD file.

Claim 10: An inspecting apparatus for inspecting a performance of a variety of circuit baseboards, comprising:

- a PLD configured to inspect a circuit baseboard based upon a signal from the circuit baseboard;
- a PLD file storing device configured to store a plurality of PLD files;
- a correspondence assigning device configured to assign correspondence of a

PLD file to a circuit baseboard to be loaded with the PLD file;

a registering memory configured to store information of the correspondence;

an ID reading device configured to read identification information and determine a circuit baseboard, said identification information being previously included in the inspection objective baseboard; and

a specifying device configured to refer to the correspondence information and specify a PLD file based on the circuit baseboard determined by the ID reading device; and

a loading device configured to load the prescribed PLD with the applicable PLD file.

Claim 11: An inspecting apparatus for inspecting a performance of a variety of circuit baseboards, comprising:

a PLD circuit configured to inspect a circuit baseboard based upon a signal from the circuit baseboard;

a PLD file storing device configured to store a plurality of PLD files;

a correspondence assigning device configured to assign correspondence of a PLD file to a circuit baseboard to be loaded with the PLD file;

a registering memory configured to store information of the correspondence;

an ID determination device configured to read identification information and determine a circuit baseboard, said identification information previously included in the circuit baseboard;

a display device configured to display a list of a plurality of circuit baseboards;

a determining device configured to determine a type of a circuit baseboard

selected from the list;

an accordance determining device configured to determine accordance of the type of the circuit baseboard specified by the circuit board determining device with that determined by the ID reading device; and

a PLD file loading device configured to refer to the correspondence information and specify an applicable PLD file in accordance with the type of the circuit baseboard from the registering memory when said determination result is positive; and

a loading device configured to load the PLD with the applicable PLD file.

Claim 12: The inspecting apparatus according to any one of claims 9 to 10, further comprising:

an item list displaying device configured to display a list of items to be inspected;

wherein said PLD file specifying device specifies an applicable PLD file in accordance with the inspection items selected from the item list.

Claim 13: The inspecting apparatus according to any one of claims 9 to 10, further comprising:

an inspection item extracting device configured to extract an inspection item from a program file to be inspected;

wherein, said PLD file specifying device specifies an applicable PLD file in accordance with the inspection items extracted by the inspection item extracting device.

Claim 14: The inspecting apparatus according to any one of claims 9 to 10, further comprising:

a load completed PLD file determining device configured to determine if a prescribed PLD file has been loaded in a PLD currently performing inspection; and

an additional PLD file specifying device configured to specify at least one unused PLD file lacking for an inspection receiving circuit baseboard, based upon the determination of the load completed PLD file determining device when a different type of a circuit baseboard is to be inspected;

wherein said PLD file specifying device reads a PLD file determined as lacking from the PLD file storing device, and said loading device deletes a PLD file determined as being disused in the PLD.

Claim 15: The inspecting apparatus according to claim 14, further comprising a log obtaining device configured to obtain log information when said PLD is loaded with the PLD file, wherein said load completed PLD file determining device determines if the PLD file has been loaded to the PLD of the inspection circuit based upon the log information.

Claim 16: The inspecting apparatus according to any one of claims 9 to 10, further comprising a circuit baseboard type determining device configured to determine sameness of successive circuit baseboards,

wherein the PLD used in the inspection for the former circuit baseboard inspects the latter one when said sameness determination is positive.

Claim 17: A general-purpose inspecting system having a log function of filing inspection resultant as a log file to be analyzed, said general-purpose inspecting system comprising:

a data sampling section configured to sample predetermined information from said log file as sample data; and

a sample data file generation section configured to generate a sample file having a smaller size than a size of the log file, said sample data file storing the sampled data.

Claim 18: The system according to claim 17, further comprising a sample data presetting section configured to preset prescribed information to be sampled from the log file, wherein said sample data file generation section automatically generates a sample data file on the basis of the prescribed information after prescribed inspection is completed.

Claim 19: A general-purpose inspecting system having a log function of filing inspection resultant in a log file to be analyzed, said general-purpose inspecting system, comprising:

a log file generation section configured to generate a log file storing the inspection resultant; and

a sample data file generation section configured to generate a sample data file configured to store predetermined information to be inspected by sampling from the log file based upon preset information.

Claim 20: The system according to claim 19, further comprising a display section configured to display contents of the sample data file.

Claim 21: The system according to claim 20, wherein said display section is configured to display contents of the sample data file using various forms of display.

Claim 22: The system according to claim 20 or claim 21, wherein said display section generates prescribed statistical data from a plurality of sample data files.

Claim 23: A general-purpose inspecting system for inspecting an object connected to an input/output interface using a command, comprising:

a software recomposing section configured to recompose a software of inspection use in accordance with a type of the object; and

means for reading inspection progress information related to the object during simulation, said means for reading displays a resultant on a screen of a display unit.

Claim 24: The system according to claim 23, further comprising:

means for displaying respective inspection items to be inspected on the screen in an order of the execution; and

means for selectively setting and resetting a breakpoint, said breakpoint halting inspection of a corresponding item,

wherein the inspection operation configured to continuously inspect items one after another is halted where the breakpoint is set by the means for selectively setting and resetting.

Claim 25: The system according to claim 24, wherein said means for setting and resetting is set in a unit of a command used in the inspection.

Claim 26: The system according to any one of claims 23 to 25, further comprising means for individually inspecting prescribed items based on an instruction.

Claim 27: The system according to any one of claims 24 to 25, further comprising means for acquiring and means for displaying inspection receiving data related to the inspection object on the screen when said inspection is halted.

Claim 28: The system according to claim 27, further comprising means for changing said inspection receiving data displayed on the screen based on an input.

Claim 29: The system according to claim 28, further comprising means for storing said inspection receiving data in a storage device.

Claim 30: The system according to claim 29, further comprising means for replacing inspection receiving data presently displayed on the screen with the inspection receiving data stored in the storage device.

Claim 31: The system according to claim 23, wherein said means for reading functions to debug and analyze the inspection receiving data.

Claim 32: A computer program product storing program instructions for execution on a computer system, which when executed by the computer system cause the computer system to perform a method to inspect an object connected to an input/output interface using a command, the method comprising:

- recombining an inspection software based on a type of the object;
- displaying respective inspection items to be inspected on a screen in order of execution;
- providing a plurality of object buttons for inspection items on the screen;
- selectively setting a breakpoint in at least one prescribed one of the object buttons;
- continuously inspecting items one after another;
- halting inspection regarding a prescribed inspection item corresponding to the set breakpoint;
- reading inspection progress information related to the object during a simulation; and
- displaying a resultant on a screen.

Claim 33: A method for inspecting an object connected to an input/output interface using a command, comprising the steps of:

- recombining an inspection software based on a type of the object;
- reading inspection progress information related to the object during a simulation; and
- displaying a resultant on a screen.

Claim 34: The method according to claim 33, further comprising the steps of:

- displaying inspection commands on the screen in order of execution;
- providing a plurality of object buttons in accordance with the inspection commands on the screen;
- selectively setting a breakpoint in a prescribed at least one of the object buttons;
- continuously inspecting items one after another; and
- halting inspection at the breakpoint in the prescribed object button.

Claim 35: The method according to any one of claims 33 to 34, further comprising the steps of inspecting prescribed items one by one on the basis of an instruction.

Claim 36: The method according to any one of claims 33 to 34, further comprising the steps of:

- acquiring inspection receiving data related to the object; and
- displaying inspection receiving data on the screen when said inspection is halted.

Claim 37: The method according to any one of claims 33 to 34, further comprising the step of inspecting a peripheral unit step by step based on an instruction from an input unit.

Claim 38: The method according to claim 37, further comprising the step of changing the inspection receiving data displayed on the screen based on an input.

Claim 39: The method according to claim 37, further comprising means for storing said inspection receiving data in a storage device.

Claim 40: The method according to claim 39, further comprising means for replacing inspection receiving data displayed on the screen with the inspection receiving data stored in the storage device.

Claim 41: A method for inspecting an object connected to an input/output interface using a command, said method comprising the steps of:

recombining a software configured to inspect based on a type of the object;
reading inspection progress information related to the object during a simulation; and
displaying a resultant on a screen.

Claim 42: A general-purpose inspecting system, comprising:

a controlled device configured to perform a prescribed function;
an interface section configured to indicate a status of the controlled device;
a control processor configured to inspect the controlled device by transmitting a prescribed command to the controlled device; and
means for determining in advance to transmission of the prescribed command whether an execution result of command processing will be abnormal by accessing the interface section and acquiring information of status of the controlled device.

Claim 43: The system according to claim 42, further comprising means for indicating the status of the controlled device by polling the interface section.

Claim 44: The system according to claim 42, further comprising means for indicating the status of the controlled device by causing an interrupt from the interface section.

Claim 45: A general-purpose inspecting method having a first thread, comprising the steps of:

- awaiting a user input in the first thread;
- transmitting a command to a controlled device based upon the user input;
- causing the controlled device to execute processing the command;
- receiving a command resultant;
- displaying a content of the command resultant at a control processor site;
- generating a second thread before entering a wait state; and
- specializing said second thread to indicate a status of the controlled device on a user interface.

Claim 46: A general-purpose inspecting method, comprising the steps of:

- awaiting a user input;
- transmitting a prescribed command to a controlled device upon the user input;
- causing the controlled device to execute the prescribed command;
- receiving the command resultant;
- displaying a content of the command resultant at a control processor site;
- determining if a specific condition is satisfied in the controlled device; and
- automatically executing specific processing by said control processor when the specific condition is satisfied.

Claim 47: A general-purpose inspecting method, comprising the steps of:

- awaiting user input;
- transmitting a prescribed command to a controlled device;
- causing the controlled device to execute processing the prescribed command;
- receiving a prescribed command resultant;
- displaying a content of the prescribed command resultant at a control processor site;
- determining if a transient phenomenon occurs when a controlled device transmits acknowledge;
- repeatedly transmitting the prescribed command until the transient phenomenon is terminated from said controlled device; and
- awaiting user input after termination of the transient phenomenon.

IX. EVIDENCE APPENDIX

None.

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X. RELATED PROCEEDINGS APPENDIX

None.